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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/560,152	03/27/2007	Hisao Tanaka	450106-05226	9468
7590 William S Frommer Frommer Lawrence & Haug 745 Fifth Avenue New York, NY 10151				
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EXAMINER				
DAZENSKI, MARC A				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/560,152

Applicant(s)

TANAKA ET AL.

Examiner

MARC DAZENSKI

Art Unit

2621

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 12-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 12-15 is/are rejected.
- 7) ☒ Claim(s) 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/S5108)
- Paper No(s)/Mail Date 12-09-2005
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

Claim 12 is objected to because of the following informalities: line 4 of the claim refers to "the management information file," but there is insufficient antecedent basis for this in the claim. The examiner recommends replacing this with "a management information file." Appropriate correction is required.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

The USPTO "Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility" (Official Gazette notice of 22 November 2005), Annex IV, reads as follows:

Descriptive material can be characterized as either "functional descriptive material" or "nonfunctional descriptive material." In this context, "functional descriptive material" consists of data structures and computer programs which impart functionality when employed as a computer component. (The definition of "data structure" is "a physical or logical relationship among data elements, designed to support specific data manipulation functions." The New IEEE Standard Dictionary of Electrical and Electronics Terms 308 (5th ed. 1993).) "Nonfunctional descriptive material" includes but is not limited to music, literary works and a compilation or mere arrangement of data.

When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. Compare *In re Lowry*, 32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994) (claim to data structure stored on a computer readable medium that increases computer efficiency held statutory) and *Warmerdam*, 33 F.3d at 1360-61, 31 USPQ2d at 1759 (claim to computer having a specific data structure stored in memory held statutory product-by-process claim) with *Warmerdam*, 33 F.3d at 1361, 31 USPQ2d at 1760 (claim to a data structure per se held nonstatutory).

In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory. See *Lowry*, 32 F.3d at 1583-84, 32 USPQ2d at 1035.

Claims 14-15 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter as follows. Claims 14 and 15 define a program and a record medium, respectively, embodying functional descriptive material. However, the claim does not define a computer-readable medium or computer-readable memory and is thus non-statutory for that reason (i.e., "When functional descriptive material is recorded on some computer-readable medium it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized" – Guidelines Annex IV). The scope of the presently claimed invention encompasses products that are not necessarily computer readable, and thus NOT able to impart any functionality of the recited program. The examiner suggests amending the claim(s) to embody the program on "computer-readable medium" or equivalent; assuming the specification does NOT define the computer readable medium as a "signal", "carrier wave", or "transmission medium" which are deemed non-statutory (refer to "note" below). Any amendment to the claim should be commensurate with its corresponding disclosure.

Note:

A "signal" (or equivalent) embodying functional descriptive material is neither a process nor a product (i.e., a tangible "thing") and therefore does not fall within one of the four statutory classes of § 101. Rather, "signal" is a form of energy, in the absence of any physical structure or tangible material.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 12-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Kikuchi et al (US Patent 6,532,334), hereinafter referred to as Kikuchi.

Regarding **claim 12**, Kikuchi discloses information reproducing system, information recording/reproducing system, and recording medium applicable to the system. Further, Kikuchi discloses a system which records and reproduces the digital moving-picture information on and from a disk, which reads on the claimed, "an information process apparatus that performs a record and reproduction process for data," as disclosed at column 12, lines 30-35 and exhibited in figure 15; the apparatus comprising:

utilizing playback control information (102) including a management information table PLY_MAT (122) as well as a program chain ("PGC") information table PGCIT, which are data necessary for playback, the data being recorded on optical disk (10) which has video data and audio data and other information, which reads on the claimed, "reproduction means for performing a reproduction process that reads and reproduces desired material data from a record medium according to the management information

file, the material data containing pictures and sound and the management information file managing a file of the material data being recorded on the record medium that is attachable and detachable to and from the information process apparatus," as disclosed at column 4, lines 33-35; column 8, lines 20-39; and exhibited in figures 1, and 3;

MPU of the microcomputer block (30) functioning as if it had a playback end information setting section (30A) by writing playback interrupt information table (124) into the disc, the table (124) including the title number of the title whose playback has been interrupted, the cell ID whose playback has been interrupted, and when the playback picture is a still picture, the time the still picture lasts and the remaining time of the still picture during the interruption of the playback are written, and further the elapsed time in reproducing a cell is written as interrupt information, which reads on the claimed, "generation means for generating reproduction history information about the reproduction process of the reproduction means, the reproduction history information composed of identification information of reproduced material data, information about a reproduction end position, and information about a reproduction method," as disclosed at column 11, lines 24-67 (with particular emphasis on lines 24-34 and lines 44-48) and column 15, lines 5-8, as well as exhibited in figures 6 and 9;

the playback interrupt information table (124) having been provided as an independent file at the same level of hierarchy as that of the playback management table (122), which reads on the claimed, "record means for recording a list of the reproduction history information generated by the generation means as one file different

from the management information file on the record medium,” as disclosed at column 12, lines 1-16 (with particular emphasis on lines 9-12) and exhibited in figure 6;

MPU of the microcomputer block (30) functioning as if it had a playback end information takeout section (30B) for taking out playback end information, which reads on the claimed, “read means for reading the list of the reproduction history information recorded on the record medium by the record means,” as disclosed at column 15, lines 5-15;

MPU of the microcomputer block (30) functioning as if it had a playback information resume specifying section (30C) for giving an instruction to resume playback using the playback information, which reads on the claimed, “reproduction command accepting means for accepting a reproduction command for the material data,” as disclosed at column 15, lines 5-15; and,

after the DVD disk (10) has been loaded into the DVD recorder, when the playback is resumed by pressing the resume playback key, the playback interrupt information table is first read from the disk, and on the basis of the playback interrupt information in the playback interrupt information table, the video object is determined, and further the PGC number to be reproduced, cell number and VOB number are determined on the basis of the playback interrupt information in the playback interrupt information table, which reads on the claimed, “reproduction control means for referencing the list of the reproduction history information read by the read means, specifying material data to be reproduced and a reproduction start position according to reproduction history information according to a reproduction method designated by the

reproduction command accepted by the reproduction command accepting means, controlling the reproduction means, and starting the reproduction process from the reproduction start position of the specified material data," as disclosed at column 16, lines 46-58 and column 18, lines 30-45.

Regarding **claim 13**, the examiner maintains the claim is the corresponding method to the apparatus of claim 12, and therefore the limitations of the claim are rejected in view of the explanation set forth in claim 12 above.

Regarding **claim 14**, the examiner maintains the claim is the corresponding program executing the method of the method of claim 13, and therefore the limitations of the claim are rejected in view of the explanation set forth in claim 13 above.

Regarding **claim 15**, the limitations of the claim are rejected in view of the explanation set forth in claim 12 above.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ogikubo (US Patent 7,099,239) discloses information record and playback apparatus and computer program having a resume function based on recorded playback stop position information.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MARC DAZENSKI whose telephone number is (571)270-5577. The examiner can normally be reached on M-F, 9am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marsha Banks-Harold can be reached on (571)272-7905. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Marsha D. Banks-Harold/
Supervisory Patent Examiner, Art Unit 2621

/MARC DAZENSKI/
Examiner, Art Unit 2621